

REMARKS

New claims 27-30 have been added and are supported by the specification:

"The security client puts the request in a memory location accessible to the security server (1610) and signals that it has done so. A "security daemon" in the first partition (1614) recognizes the signal and starts a "proxy" client (1616) in the first partition (1614). The proxy (1616) client calls the security server with the request using the interface native to the security server (1601). (page 36 lines 9-21). The applicant respectfully submits that new claims 27-30 are allowable, which allowance is respectfully requested.

In paragraph 2 of the office action, the examiner rejects claims 5, 12 and 18 under 35 U.S.C. 112, second paragraph for reciting "the proxy client" without proper antecedent basis. The applicant has amended the claims to depend on claims 2, 9 and 15 respectively that introduce "the proxy client" limitation.

In paragraph 4 of the office action, the examiner objects to the drawings for failing to include reference characters 101B, 102B, 102A, 101A (page 15 line 20-31); 200, 201A1 (page 17 line 5); 300 (page 19 line 5). The drawings have been amended accordingly.

In paragraph 5 of the office action, the examiner objects to drawings FIG. 2, FIG. 3, FIG. 4, FIG. 7, FIG. 8, FIG 15 and FIG. 16 because they include reference characters not mentioned in the description. As to FIG. 2, the reference to 200A2 and 200A1 have been amended in the specification (page 17, line 5) included herewith. The applicant has amended the drawings accordingly. The applicant submits that the drawings as amended are allowable, which allowance is respectfully requested.

In paragraph 7 of the office action the examiner rejects claims 1-26 under 35 U.S.C. 103(a) as being unpatentable over Kung (US 5,241,594) in view of Drogichen et al (US 5,931,938).

The examiner says that Kung is silent on "the processing system being a partitioned processing system having a first partition which includes a common security server and a second partition which includes a security client and for transmitting a first response (to) the request for authorization from the common security server in the first partition to the security client in the second partition said transmission of one of said request or said first response between partitions being by way of main storage." The examiner says Drogichen discloses a partitioned processing system consisting of independent systems and communication between the partitions by way of main storage (col 1, ln 50-55 and col 3 ln 45-50). The examiner says it would have been obvious to one of ordinary skill in the art at the time of the applicant's invention to further incorporate the partitioning of a processing system of Drogichen within the system of Kung because it would have provided a means of processing secure user authorization by a stable means wherein errors caused by one process does not effect other process (see Drogichen, col 1 ln 45-62). The applicant disagrees. The examiner cites motivation to combine the references as motive to combine Drogichen into Kung because of Drogichen's reducing the probability of errors of one process effecting another. The cited reference is discussing an improvement in isolating domains so they use separate hardware as opposed, we assume, to a system such as the IBM mainframe, wherein the system can be partitioned into partitions that share resources. Kung already has separate computing systems so the advantage cited as motivation to combine is not there since individual computing systems share no hardware wherein the system of Drogichen shares memory and even exports memory between partitions, thus having a common hardware point of failure mode

that is not present in Kung. Such a motivation would teach away from combining the references. This is particularly true wherein the function involved pertains to security and Drogichen exposes the two partitions to common fault modes.

Furthermore, the system of Kung permits a user workstation to negotiate with the multiple logon server directly. The examiners citation of Kung would indicate that the Kung workstation would be equivalent to a first partition of the invention and the multiple logon server of Kung would be equivalent to a second partition of the invention. The applicant fails to understand how Kung or Drogichen would go about employing a workstation function in a partition of a server.

Furthermore, while Drogichen implies a shared memory between domains, it does not enable the use of shared memory for applications of the present invention. According to the present invention, as shown in the specification: "The security client puts the request in a memory location accessible to the security server (1610) and signals that it has done so. A "security daemon" in the first partition (1614) recognizes the signal and starts a "proxy" client (1616) in the first partition (1614). The proxy (1616) client calls the security server with the request using the interface native to the security server (1601). (page 36 lines 9-21)

The security server (1601) processes the request and returns the servers response to the proxy client (1616). The proxy client puts the security server's response in memory accessible to the security client in the second partition and signals that it has done so. The signal wakes up the security client (1603) pointing to the authorization." (page 36 lines 9-21). A mention in Drogichen of shareable memory cannot be construed to teach any use of sharing memory as taught by the present invention.

Therefore, the applicant submits that the claims 1, 8, 14 and 20 are in condition for allowance, which allowance is respectfully requested.

The examiner says "as per claims 3, 10, 16 and 22, Kung-Drogichen" includes use of main storage shared between partitions. The applicant disagrees. The reference of Drogichen indicates that "clusters allow multiple domains to share a common range of memory addresses, for rapid data transfer" and "certain domains need high bandwidth communications with each other by sharing one or more segments of their individually addressable memory". Drogichen does not express or imply any specific use of the shared memory as shown in the claims. Neither Drogichen nor Kung express or imply providing an inter-application memory to memory communication between partitions to perform a function already performed by traditional I/O device/driver interfaces. In fact, Drogichen teaches away from the use of shared memory for traditional domain to domain I/O communication "The processors, memory, and I/O of a domain act as a single unified computing system" (col 2 lines 39-41) and "Software isolation means that no software running in one domain can affect software running in another domain... This requires that each domain have its own physical processors, memory units, and I/O adapters not shared with those of other domains." (col 3, lines 4-8). Therefore the claims 3, 10, 16 and 22 are allowable, which allowance is respectfully requested.

The examiner says as per claims 4, 11, 17 and 23, Drogichen discloses a memory to memory data mover (col 6, ln 2-31 and col 7 ln 52-59). The Drogichen reference is to a router directing memory access to memory. According (for example) to the present application a data mover is an adapter for moving data between partitions:

"The IBM S/390 Gbit Ethernet (Asynchronous Coprocessor Data Mover Method and Means, U.S. Patent No. 5442802, issued August

15,1995 and assigned to IBM) I/O adapter can be used to move data from one partition's kernel memory to another, but the data is moved from the first kernel memory to a queue buffer on the adapter and then transferred to a second queue buffer on the adapter before being transferred to a second kernel memory." (page 6 first paragraph). Drogichen's router is not a data mover of the claims, therefore claims 4, 11, 17 and 23 are in condition for allowance, which allowance is respectfully requested.

The examiner says claims 2, 5, 9, 12, 15, 18, 21 and 24 are taught by Kung-Drogichen in combination with Hu. That Hu teaches

"b1) signaling by the security client running in the second partition, a first program running in the first partition to start a proxy client in the first partition; and,

b2) transmitting the request from the proxy client to the security server in the first partition." The applicant disagrees.

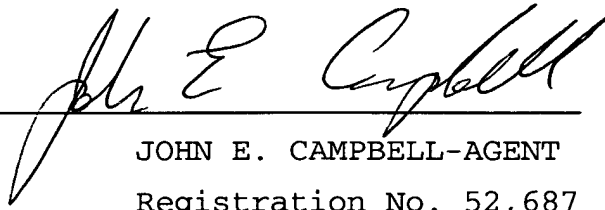
There is no motivation to combine Hu as Hu is directed to a Proxy server gateway, which proxy server handles authorization for the host system to which it is a proxy. Kung-Drogichen, if combined would already provide such authorization for multiple hosts. Furthermore, the combination is silent on a security client starting any sort of client in another partition. Hu's proxy server of a gateway system is not started by any request. It is always there. Furthermore, the proxy server in Hu is separate from the authentication process. Therefore, the claims 2, 5, 9, 12, 15, 18, 21 and 24 are allowable, which allowance is respectfully requested.

As claims 2-7, 9-13, 15-19 and 21-26 depend on allowable claims 1, 8, 14 and 20, they are also allowable, which allowance is respectfully requested.

It is respectfully submitted that the application is now in condition for allowance, which allowance is respectfully requested.

RESPECTFULLY SUBMITTED

BY: _____

A handwritten signature in cursive script, appearing to read "John E. Campbell", is written over a horizontal line.

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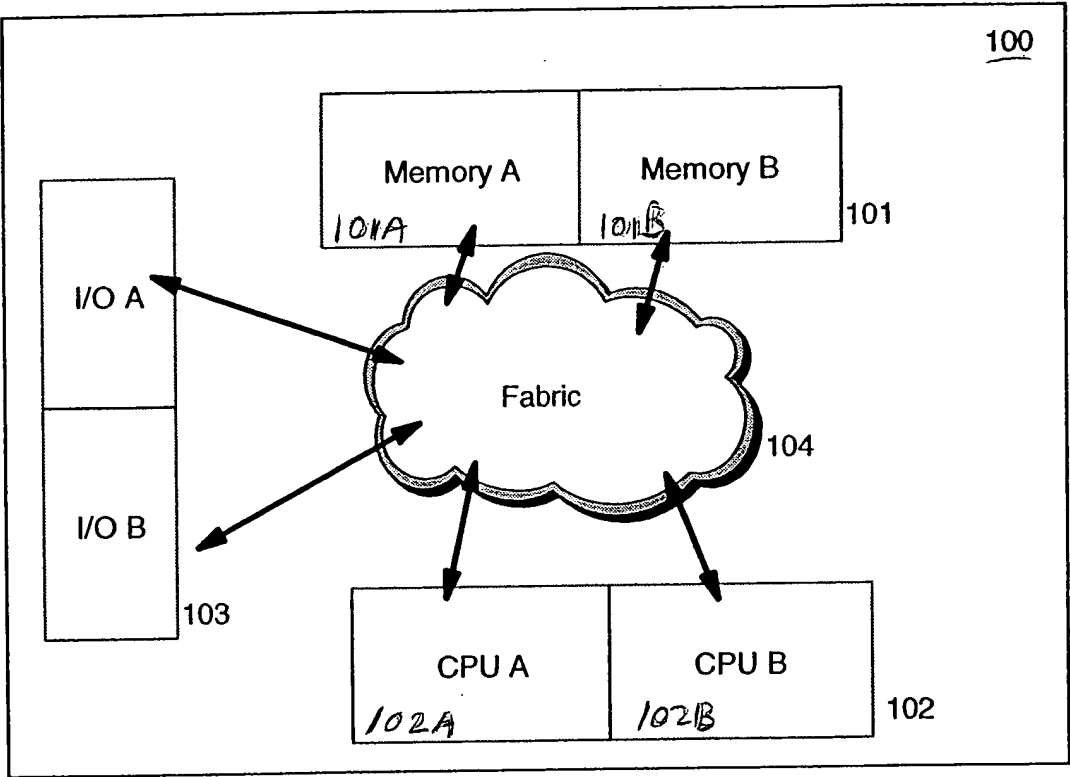


Fig 1

200

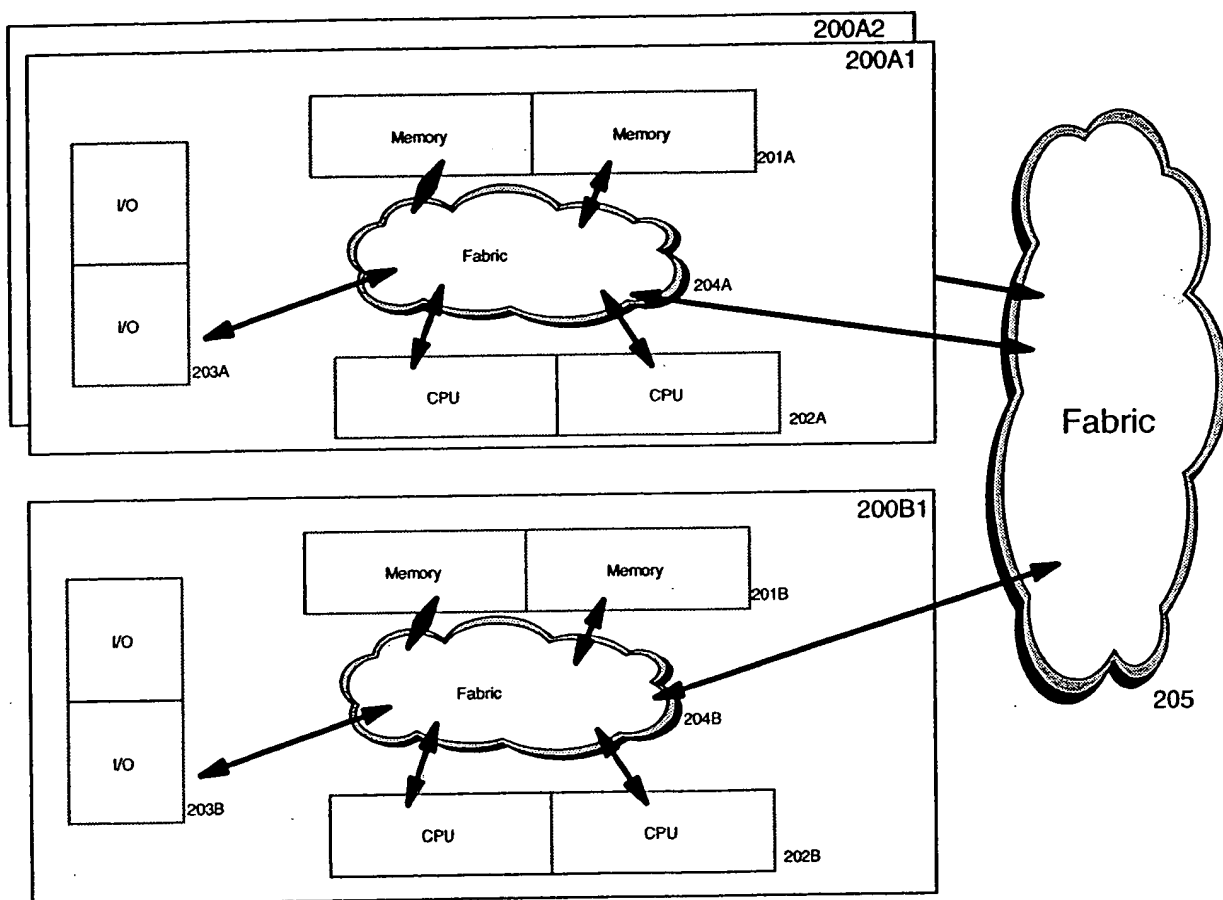


Fig 2

300

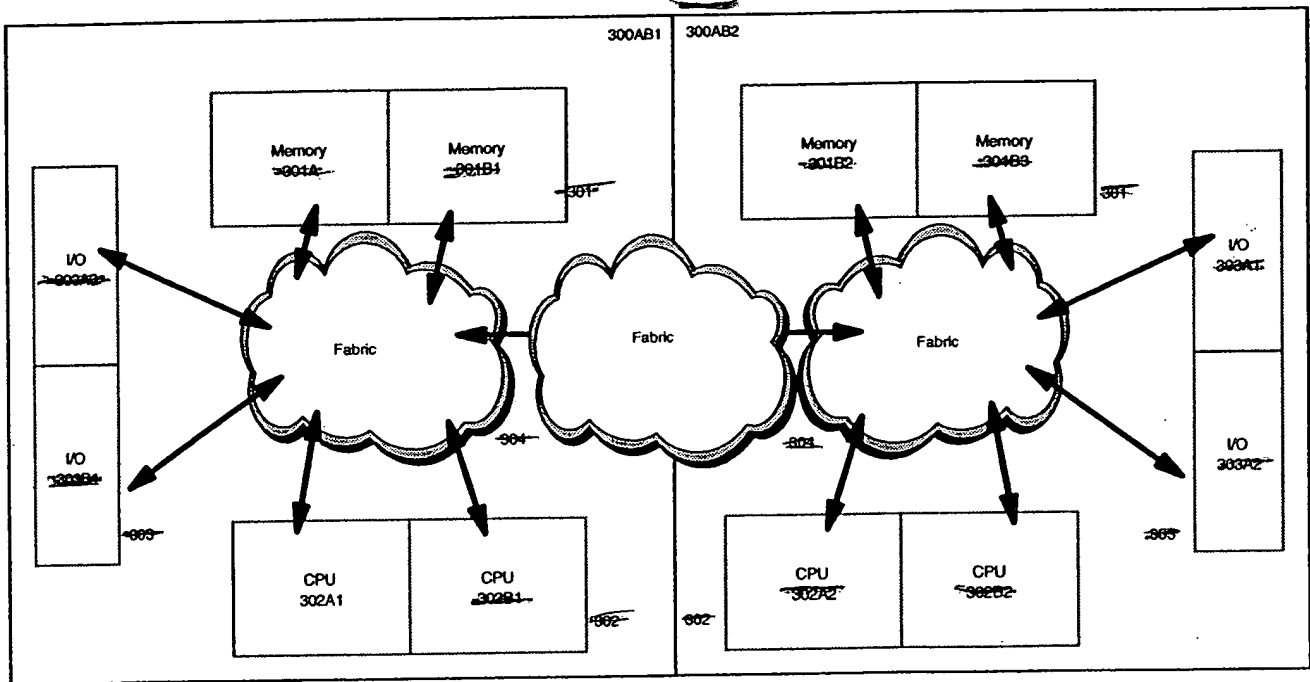


Fig 3

Virtualization allows sharing of CPUs and I/O elements by multiple partitions

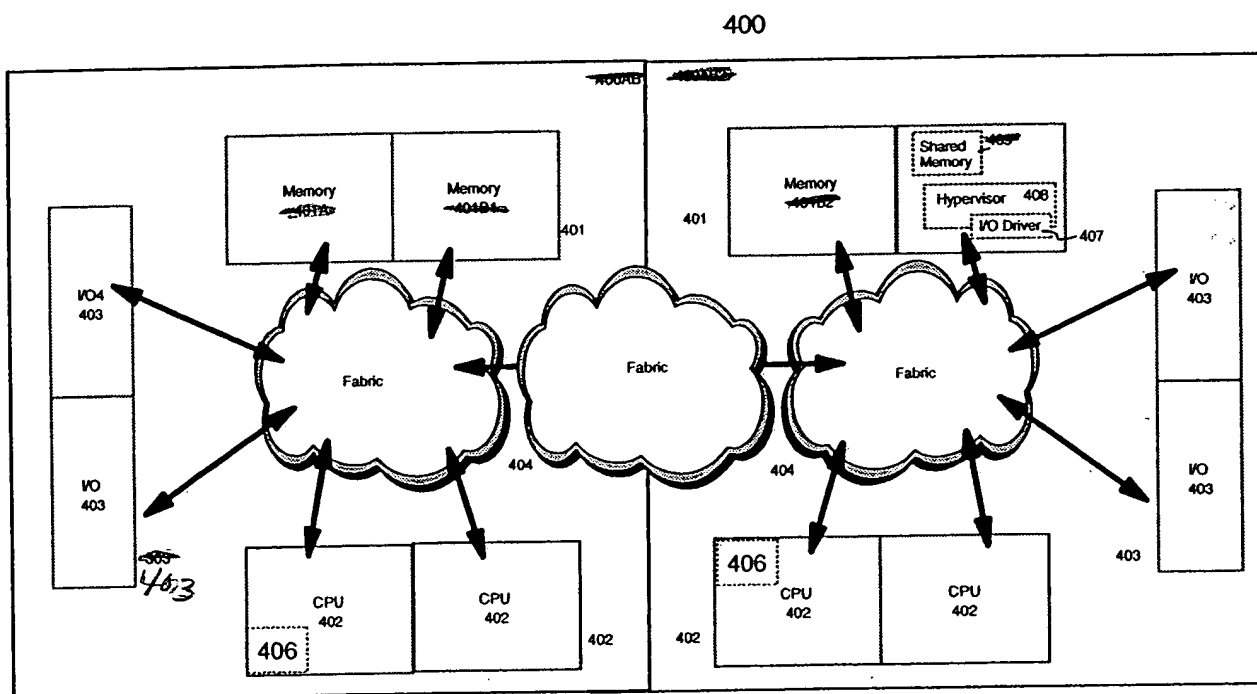


Fig 4



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Replacement Page

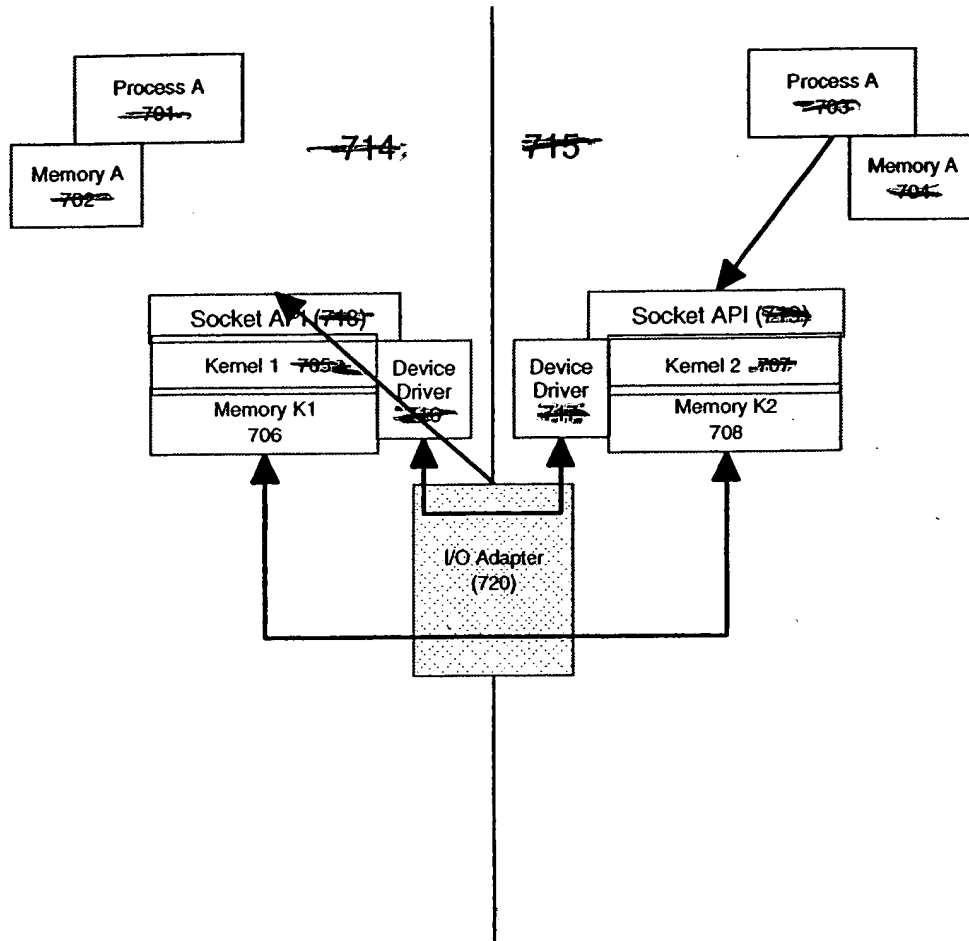
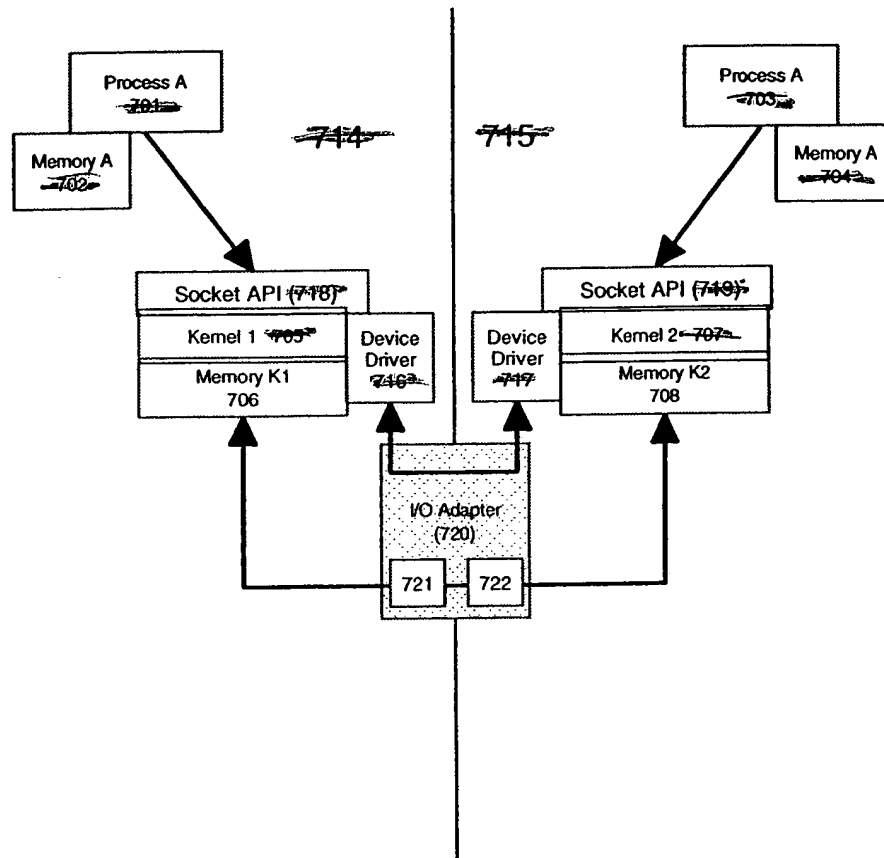


Fig 7A



The Prior Art
Fig 7B

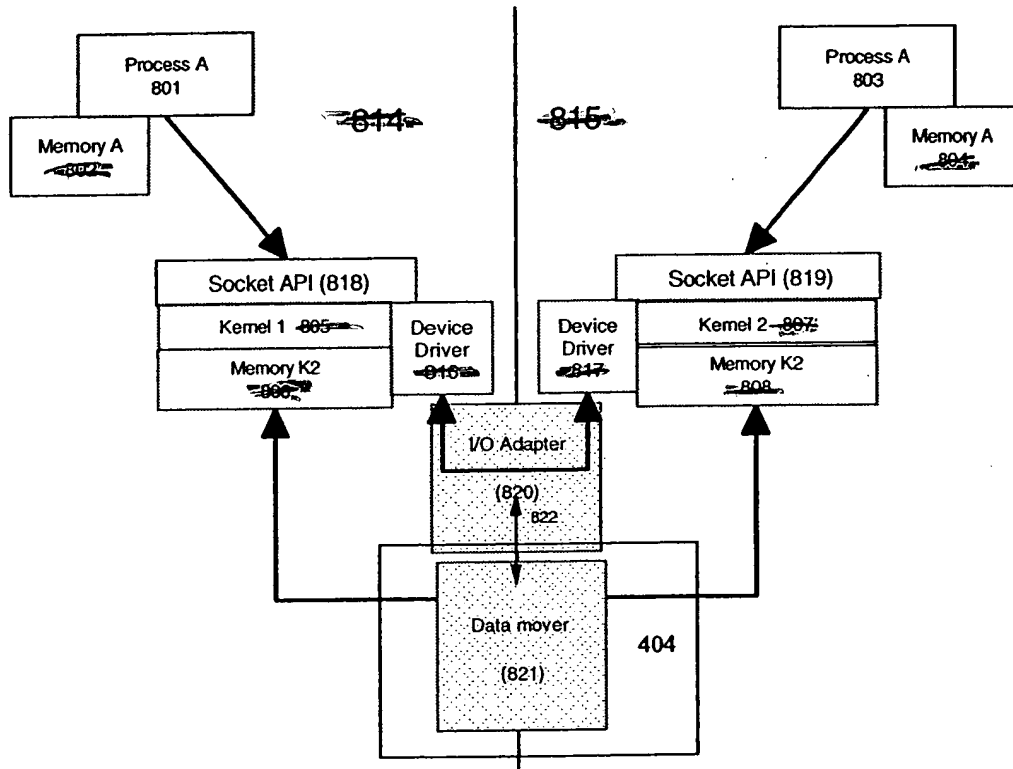


Fig 8

Fig 15

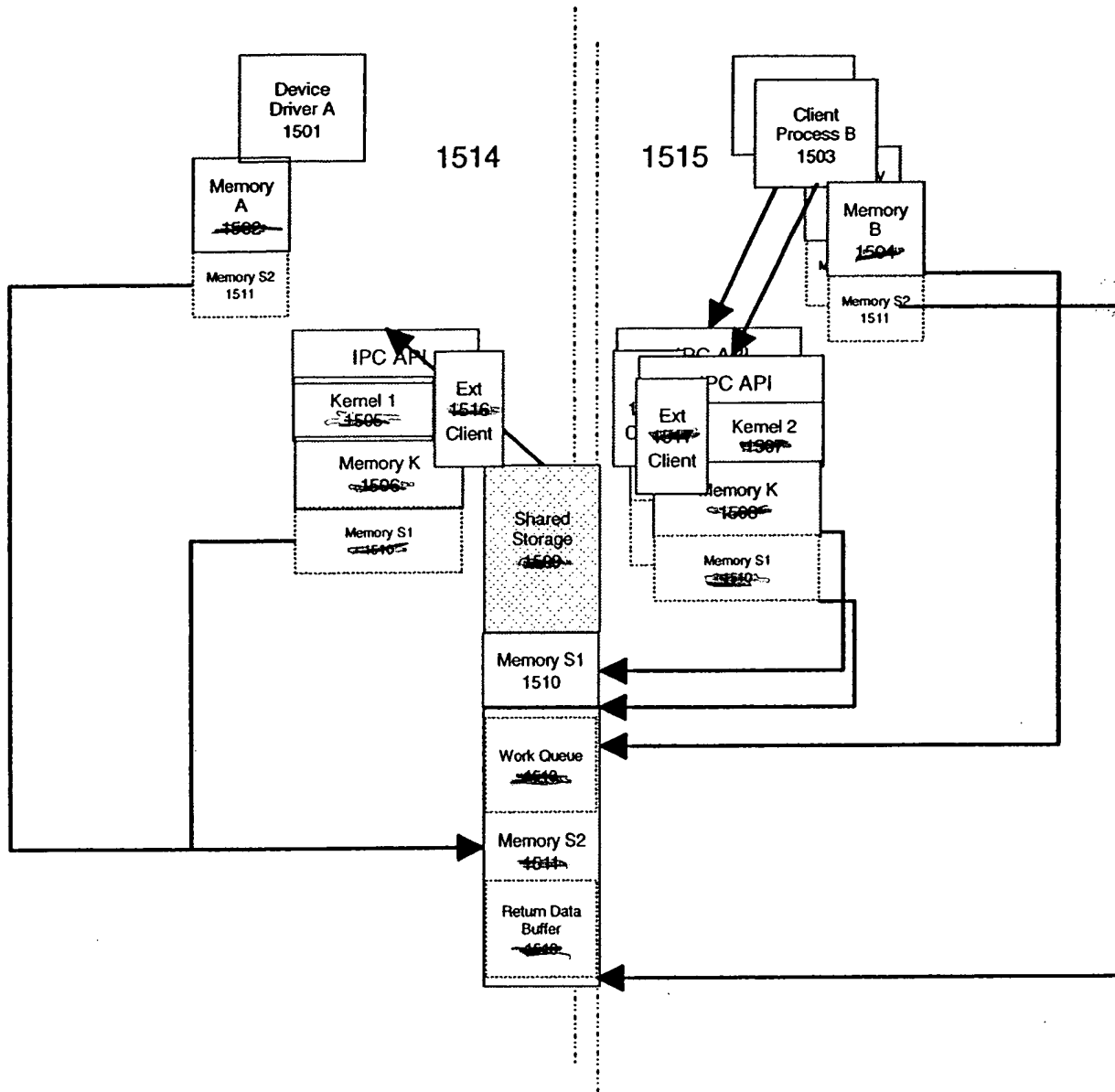


Fig 16

